



Montana Department of
ENVIRONMENTAL QUALITY

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October 14, 2011

Tim Gregori
Southern Montana Electric Generation and Transmissions Cooperative, Inc.
3521 Gabel Road, Suite 5
Billings, MT 59102

RE: Draft Title V Operating Permit #OP4429-00

Dear Mr. Gregori:

The Department of Environmental Quality has prepared the enclosed Draft Operating Permit #OP4429-00, for Southern Montana Electric Generation and Transmissions Cooperative, Inc.'s Highwood Generating Station Natural Gas Plant, located in Section 24 and 25, Township 21 North, Range 5 East, Cascade County, Montana. Please review the cover page of the attached permit for information pertaining to the action taking place on Permit #OP4429-00.

If you have any questions, please contact Shawn Juers, the permit writer, at (406) 444-2049 or by email at sjuers@mt.gov.

Sincerely,

Vickie Walsh
Air Permitting Program Supervisor
Air Resources Management Bureau
(406) 444-9741

Shawn Juers
Environmental Engineer
Air Resources Management Bureau
(406) 444-2049

VW: SJ

Enclosure

cc: Christopher Ajayi, US EPA Region VIII 8P-AR
Angela Phipps, Stanley Consultants

State of Montana
Department of Environmental Quality
Helena, Montana 59620

AIR QUALITY OPERATING PERMIT NUMBER OP4429-00

Initial Application Received: April 24, 2009
Application Deemed Administratively Complete: May 26, 2009
Application Deemed Technically Complete: August 3, 2009
AFS Number: 030-013-0038A

Draft Issue Date: **October 14, 2011**

Proposed Issue Date:

End of EPA 45-day Review:

Date of Decision:

Effective Date:

Expiration Date:

In accordance with the Montana Code Annotated (MCA) Sections 75-2-217 and 218, and Administrative Rules of Montana (ARM), Title 17, Chapter 8, Subchapter 12, Operating Permit Program, ARM 17.8.1201, *et seq.*,

**Southern Montana Electric Generation and Transmissions Cooperative, Inc
Highwood Generating Station Natural Gas Plant
Section 24 and 25, Township 21 North, Range 5 East, Cascade County, Montana
Great Falls, Montana**

hereinafter referred to as "SME," is authorized to operate a stationary source of air contaminants consisting of the emissions units described in this permit. Until this permit expires, is modified, or revoked, the permittee is allowed to discharge air pollutants in accordance with the conditions of this permit. All conditions in this permit are federally and state enforceable, unless otherwise specified. Requirements that are only state enforceable are identified in the permit. A copy of this permit must be kept on site at the above-named facility.

Permit Issuance and Appeal Processes: In accordance with ARM 17.8.1232, the Department of Environmental Quality (Department) is providing a 30-day public comment period from October 14, 2011, to November 14, 2011, to accept comments on this draft permit. Any member of the public, including representatives of the facility, desiring to comment on this draft permit must submit all comments to the Department by November 14, 2011, to be considered. Comments may address the Department analysis and determination or information submitted by the applicant. A public hearing regarding issuance of this permit may be requested by submitting a written request to the Department within the public comment period. The Department intends to issue the proposed operating permit after the comment period has expired and after any required public hearing. The proposed permit will be sent to the United States Environmental Protection Agency (EPA). The EPA is allowed a 45-day comment period on the proposed permit. After the EPA comment period has expired, the Department intends to issue a decision on the permit. In accordance with Section 75-2-218, MCA, the Department's decision regarding issuance of the permit is not effective until 30 days have elapsed from the date of the decision. The decision may be appealed to the Board of Environmental Review (Board) by filing a request for a hearing within 30 days after the date of decision. For more information please contact the Department at (406) 444-3490.

Montana Air Quality Operating Permit
Department of Environmental Quality

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Terms not otherwise defined in this permit or in the Definitions and Abbreviations Appendix of this permit have the meaning assigned to them in the referenced regulations.

SECTION I. GENERAL INFORMATION

The following general information is provided pursuant to ARM 17.8.1210(1).

Company Name: Southern Montana Electric Generation and Transmissions Cooperative, Inc

Mailing Address: 3521 Gabel Road, Suite 5

City: Billings

State: MT

Zip: 59102

Plant Location: Section 24 and 25, Township 21 North, Range 5 East, Cascade County, Montana

Responsible Official: Tim Gregori

Phone: (406) 294-9527

Facility Contact Person: Tim Gregori

Phone: (406) 294-9527

Primary SIC Code: 4911 – Electric Services

Nature of Business: Electric Generation

Description of Process: The Southern Montana Electric Generation and Transmissions Cooperative, Inc. Highwood Generating Station Natural Gas Plant will consist of two natural gas-fired combustion turbines for electric power generation with a combined net output of approximately 120 megawatts (MW), operated in either a simple cycle mode (no heat recovery) or combined cycle mode (heat recovery used to operate a steam powered electric generator).

The proposed generating units for the gas plant are two General Electric LM6000PF Dry Low Emissions (DLE) combustion turbines (DLE is the turbine manufacturer term for Dry Low NO_x burners or DLN). Each of the two LM6000PF generating units is rated at approximately 43 MW at 100% load at 54.7 degrees Fahrenheit (°F) ambient temperature. Including the electricity generated from the heat recovery steam generators and steam turbine, the plant gross total is approximately 120 MW. Pipeline quality natural gas is the selected operations and startup fuel.

A black-start emergency generator and fire pump will be installed, both diesel-powered. Aqueous ammonia will be stored in above-ground horizontal tanks for use in the Selective Catalytic Reduction (SCR) air pollution control device that has been selected as BACT for control of NO_x emissions during combined cycle operation.

Cooling towers will be used to dissipate the heat from the condenser. The proposed cooling towers will be an induced, counter flow draft design equipped with drift eliminators. The average make-up water rate for the proposed cooling towers will be approximately 394 gallons per minute (gpm).

SME plans to construct the facility in two phases. Phase I includes the construction and operation of two natural gas-fired turbines to operate in simple cycle mode. In Phase II, SME will add duct burners, heat recovery equipment and a steam-driven turbine to make the facility a combined cycle system.

SECTION II. SUMMARY OF EMISSION UNITS

The emission units regulated by this permit are the following (ARM 17.8.1211):

Emissions Unit ID	Description	Pollution Control Device/Practice
EU001	General Electric LM6000PF DLE Combustion Turbine	Catalytic Oxidizer, Selective Catalytic Reduction
EU002	General Electric LM6000PF DLE Combustion Turbine	Catalytic Oxidizer, Selective Catalytic Reduction
EU003	2,206 bhp diesel-fired emergency generator engine	500 hr/yr
EU004	343 bhp fire pump engine	500 hr/yr
EU005	Fugitive Dust Emissions	Water and/or chemical dust suppression

SECTION III. PERMIT CONDITIONS

The following requirements and conditions are applicable to the facility or to specific emission units located at the facility (ARM 17.8.1211, 1212, and 1213).

A. Facility-Wide

Conditions	Rule Citation	Rule Description	Pollutant/Parameter	Limit
A.1	ARM 17.8.105	Testing Requirements	Testing Requirements	-----
A.2	ARM 17.8.304(1)	Visible Air Contaminants	Opacity	40%
A.3	ARM 17.8.304(2)	Visible Air Contaminants	Opacity	20%
A.4	ARM 17.8.308(1)	Particulate Matter, Airborne	Fugitive Opacity	20%
A.5	ARM 17.8.308(2)	Particulate Matter, Airborne	Reasonable Precautions	-----
A.6	ARM 17.8.308	Particulate Matter, Airborne	Reasonable Precaution, Construction	20%
A.7	ARM 17.8.309	Particulate Matter, Fuel Burning Equipment	Particulate Matter	$E = 0.882 * H^{-0.1664}$ Or $E = 1.026 * H^{-0.233}$
A.8	ARM 17.8.310	Particulate Matter, Industrial Processes	Particulate Matter	$E = 4.10 * P^{0.67}$ or $E = 55 * P^{0.11} - 40$
A.9	ARM 17.8.322(4)	Sulfur Oxide Emissions, Sulfur in Fuel	Sulfur in Fuel (liquid or solid fuels)	1 lb/MMBtu fired
A.10	ARM 17.8.322(5)	Sulfur Oxide Emissions, Sulfur in Fuel	Sulfur in Fuel (gaseous)	50 gr/100 CF
A.11	ARM 17.8.324(3)	Hydrocarbon Emissions, Petroleum Products	Gasoline Storage Tanks	-----
A.12	ARM 17.8.324	Hydrocarbon Emissions, Petroleum Products	65,000 Gallon Capacity	-----
A.13	ARM 17.8.324	Hydrocarbon Emissions, Petroleum Products	Oil-effluent Water Separator	-----
A.14	ARM 17.8.342	NESHAP's General Provisions	SSM Plans	Submittal
A.15	ARM 17.8.1211(1)(c) and 40 CFR Part 98	Greenhouse Gas Reporting	Reporting	-----
A.16	ARM 17.8.749	Construction and Startup Notification	Commencement of construction and startup of each turbine in each mode	Construction: 30 days Startup: 15 days
A.17	ARM 17.8.1234 and 40 CFR Parts 72-78	Acid Rain Program	As applicable	As applicable
A.18	ARM 17.8.1212	Reporting Requirements	Prompt Deviation Reporting	-----
A.19	ARM 17.8.1212	Reporting Requirements	Compliance Monitoring	-----
A.20	ARM 17.8.1207	Reporting Requirements	Annual Certification	-----

Conditions

- A.1. Pursuant to ARM 17.8.105, any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct test(s), emission or ambient, for such periods of time as may be necessary using methods approved by the Department.

Compliance demonstration frequencies that list “as required by the Department” refer to ARM 17.8.105. In addition, for such sources, compliance with limits and conditions listing “as required by the Department” as the frequency, is verified annually using emission factors and engineering calculations by the Department’s compliance inspectors during the annual emission inventory review; in the case of Method 9 tests, compliance is monitored during the regular inspection by the compliance inspector.

- A.2. Pursuant to ARM 17.8.304(1), SME shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed on or before November 23, 1968, that exhibit an opacity of 40% or greater averaged over 6 consecutive minutes, unless otherwise specified by rule or in this permit.
- A.3. Pursuant to ARM 17.8.304(2), SME shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes, unless otherwise specified by rule or in this permit.
- A.4. Pursuant to ARM 17.8.308(1), SME shall not cause or authorize the production, handling, transportation, or storage of any material unless reasonable precautions to control emissions of particulate matter are taken. Such emissions of airborne particulate matter from any stationary source shall not exhibit an opacity of 20% or greater averaged over 6 consecutive minutes, unless otherwise specified by rule or in this permit.
- A.5. Pursuant to ARM 17.8.308(2), SME shall not cause or authorize the use of any street, road or parking lot without taking reasonable precautions to control emissions of airborne particulate matter, unless otherwise specified by rule or in this permit.
- A.6. Pursuant to ARM 17.8.308, SME shall not operate a construction site or demolition project unless reasonable precautions are taken to control emissions of airborne particulate matter. Such emissions of airborne particulate matter from any stationary source shall not exhibit an opacity of 20% or greater averaged over 6 consecutive minutes, unless otherwise specified by rule or in this permit.
- A.7. Pursuant to ARM 17.8.309, unless otherwise specified by rule or in this permit, SME shall not cause or authorize particulate matter caused by the combustion of fuel to be discharged from any stack or chimney into the outdoor atmosphere in excess of the maximum allowable emissions of particulate matter for existing fuel burning equipment and new fuel burning equipment calculated using the following equations:

For existing fuel burning equipment (installed before November 23, 1968):

$$E = 0.882 * H^{-0.1664}$$

For new fuel burning equipment (installed on or after November 23, 1968):

$$E = 1.026 * H^{-0.233}$$

Where H is the heat input capacity in MMBtu per hour and E is the maximum allowable particulate emissions rate in lb/MMBtu.

- A.8. Pursuant to ARM 17.8.310, unless otherwise specified by rule or in this permit, SME shall not cause or authorize particulate matter to be discharged from any operation, process, or activity into the outdoor atmosphere in excess of the maximum hourly allowable emissions of particulate matter calculated using the following equations:

For process weight rates up to 30 tons per hour: $E = 4.10 * P^{0.67}$

For process weight rates in excess of 30 tons per hour: $E = 55.0 * P^{0.11} - 40$

Where E = rate of emissions in pounds per hour and P = process weight rate in tons per hour.

- A.9. Pursuant to ARM 17.8.322(4), SME shall not burn liquid or solid fuels containing sulfur in excess of 1 pound per million British thermal units (lb/MMBtu) fired, unless otherwise specified by rule or in this permit.
- A.10. Pursuant to ARM 17.8.322(5), SME shall not burn any gaseous fuel containing sulfur compounds in excess of 50 grains per 100 cubic feet of gaseous fuel, calculated as hydrogen sulfide at standard conditions, unless otherwise specified by rule or in this permit.
- A.11. Pursuant to ARM 17.8.324(3), SME shall not load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank is equipped with a vapor loss control device or is a pressure tank as described in ARM 17.8.324(1), unless otherwise specified by rule or in this permit.
- A.12. Pursuant to ARM 17.8.324, unless otherwise specified by rule or in this permit, SME shall not place, store or hold in any stationary tank, reservoir or other container of more than 65,000 gallon capacity any crude oil, gasoline or petroleum distillate having a vapor pressure of 2.5 pounds per square inch absolute or greater under actual storage conditions, unless such tank, reservoir or other container is a pressure tank maintaining working pressure sufficient at all times to prevent hydrocarbon vapor or gas loss to the atmosphere, or is designed and equipped with a vapor loss control device, properly installed, in good working order and in operation.
- A.13. Pursuant to ARM 17.8.324, unless otherwise specified by rule or in this permit, SME shall not use any compartment of any single or multiple-compartment oil-effluent water separator, which compartment receives effluent water containing 200 gallons a day or more of any petroleum product from any equipment processing, refining, treating, storing or handling kerosene or other petroleum product of equal or greater volatility than kerosene, unless such compartment is equipped with a vapor loss control device, constructed so as to prevent emission of hydrocarbon vapors to the atmosphere, properly installed, in good working order and in operation.
- A.14. Pursuant to ARM 17.8.342 and 40 CFR 63.6, SME shall submit to the Department a copy of any startup, shutdown, and malfunction (SSM) plan required under 40 CFR 63.6(e)(3) within 30 days of the effective date of this operating permit (if not previously submitted), within 30 days of the compliance date of any new National Emission Standard for Hazardous Air Pollutants (NESHAPs) or Maximum Achievable Control Technology (MACT) standard, and within 30 days of the revision of any such SSM plan, when applicable. The Department requests submittal of such plans in electronic form, when possible.
- A.15. Pursuant to ARM 17.8.1211(1)(c) and 40 CFR Part 98, SME shall comply with requirements of 40 CFR Part 98 – Mandatory Greenhouse Gas Reporting, as applicable (ARM 17.8.1211(1)(c), NOT an applicable requirement under Title V).
- A.16. SME shall provide the Department with written notification of the following information within the specified time periods (ARM 17.8.749):
- Actual startup date of each turbine generator for each mode of operation (simple cycle and combined cycle) within 15 working days after the actual startup of each turbine generator for each mode of operation.
- A.17. SME shall comply with all applicable standards and limitations, and the monitoring, reporting, recordkeeping, notification, and reporting requirements of the Acid Rain Program contained in 40 CFR Parts 72 – 78 (40 CFR part 72 through 78 and ARM 17.8.1213).

- A.18. SME shall promptly report deviations from permit requirements including those attributable to upset conditions, as upset is defined in the permit. To be considered prompt, deviations shall be reported to the Department using the schedule and content as described in Section V.E (unless otherwise specified in an applicable requirement) (ARM 17.8.1212).
- A.19. On or before February 15 and August 15 of each year, SME shall submit to the Department the compliance monitoring reports required by Section V.D. These reports must contain all information required by Section V.D, as well as the information required by each individual emissions unit. For the reports due by February 15 of each year, SME may submit a single report, provided that it contains all the information required by Section V.B & V.D. Per ARM 17.8.1207,
- any application form, report, or compliance certification submitted pursuant to ARM Title 17, Chapter 8, Subchapter 12 (including semiannual monitoring reports), shall contain certification by a responsible official of truth, accuracy and completeness. This certification and any other certification required under ARM Title 17, Chapter 8, Subchapter 12, shall state that, “based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.”*
- A.20. By February 15 of each year, SME shall submit to the Department the compliance certification required by Section V.B. The annual certification required by Section V.B must include a statement of compliance based on the information available which identifies any observed, documented or otherwise known instance of noncompliance for each applicable requirement. Per ARM 17.8.1207,

any application form, report, or compliance certification submitted pursuant to ARM Title 17, Chapter 8, Subchapter 12 (including annual certifications), shall contain certification by a responsible official of truth, accuracy and completeness. This certification and any other certification required under ARM Title 17, Chapter 8, Subchapter 12, shall state that, “based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.”

B. EU001 and EU002: Turbines – General Conditions

General Conditions (Applicable to Simple Cycle Operations AND Combined Cycle Operations)

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration Method Frequency		Reporting Requirements
B.1, B.11, B.21, B.29, B.32, B.33	Opacity	20%	Method 9	As required by the Department and Section III.A.1	Semiannual
B.2, B.12, B.23, B.32, B.33	Stack Requirements	Separate stacks for each turbine and each cycle 80 ft and 105 ft	Recordkeeping	Ongoing	Semiannual
B.3, B.13, B.24, B.30, B.32, B.33	NO _x	25 ppmvd	As required by 40 CFR 60, Subpart KKKK, which may include CEMS	As required by 40 CFR 60, Subpart KKKK	As required by 40 CFR 60, Subpart KKKK and Semiannual

B.4, B.14, B.24, B.30, B.32, B.33	SO ₂	110 ng/J gross output or combustion fuel of less than or equal to 26 ng SO ₂ /J heat input	As required by 40 CFR 60, Subpart KKKK,	As required by 40 CFR 60, Subpart KKKK	As required by 40 CFR 60, Subpart KKKK and Semiannual
B.5, B.15, B.24, B.30, B.32, B.33	40 CFR 60, Subpart KKKK	40 CFR 60, Subpart KKKK	As required by 40 CFR 60, Subpart KKKK	As required by 40 CFR 60, Subpart KKKK	As required by 40 CFR 60, Subpart KKKK and Semiannual
B.6, B.16, B.21, B.25, B.26, B.29, B.32, B.33	Generating units, monitoring equipment and ancillary equipment	Good air pollution control practices for minimizing emissions	CEMS, opacity observations, maintenance, operation of control equipment	Ongoing	Semiannual
B.7, B.17, B.25, B.26, B.32, B.33	Dry Low NO _x Burners	Utilization during all simple cycle and combined cycle operations	Recordkeeping	Ongoing	Semiannual
B.8, B.16, B.18, B.21, B.22, B.25, B.26, B.29, B.32, B.33	PM, PM ₁₀ , PM _{2.5} , NO _x , and SO ₂	Pipeline quality natural gas and good air pollution control practices	Recordkeeping	Ongoing	Semiannual
B.9, B.19, B.27, B.31, B.32, B.33	Acid Rain Program	40 CFR Parts 72-78, as applicable	As applicable	As applicable	Semiannual
B.10, B.20, B.28, B.32, B.33	PSD Application required for change in allowable simple cycle hours of operation or change in fuel quality or quantity	Full BACT analysis as if never built	Analysis with each application	Ongoing	Semiannual

Conditions

- B.1. SME shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source that exhibit opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304(2)).
- B.2. Each turbine shall have one stack dedicated to emissions from simple cycle operation, and a second stack dedicated to emissions from combined cycle operation. Simple cycle stacks shall be at least 80 feet tall from grade; combined cycle stacks shall be at least 105 feet tall from grade (ARM 17.8.749).
- B.3. Emissions of oxides of nitrogen (NO_x) from any stack shall not exceed 25 parts per million dry volume (ppmvd) at 15% oxygen (O₂), or 150 nanograms per Joule (ng/J) of useful output (1.2 pound per megawatt-hour, lb/MWh), effective during all periods of operation, including periods of startup, shutdown, transient, and commissioning operation, in accordance with the standards and limitations, and reporting, recordkeeping and notification requirements contained in 40 CFR 60 Subpart KKKK (ARM 17.8.749, ARM 17.8.340, and 40 CFR 60, Subpart KKKK).
- B.4. Emissions of sulfur dioxide (SO₂) from any stack shall not exceed 110 nanogram per joule (ng/J) (0.90 lb/MWh) gross output, effective during all periods of operation, including periods of startup, shutdown, transient, and commissioning operation; or, SME shall not burn in the subject stationary combustion turbines any fuel which contains total potential sulfur emissions in excess of 26 ng SO₂/J (0.060 lb SO₂ per MMBtu, lb/MMBtu) heat input (ARM 17.8.749, ARM 17.8.340, and 40 CFR 60, Subpart KKKK).

- B.5. SME shall comply with all applicable standards and limitations, and the reporting, recordkeeping and notification requirements contained in 40 CFR 60, Subpart KKKK (ARM 17.8.340 and 40 CFR 60, Subpart KKKK).
- B.6. SME shall operate and maintain the generating units, monitoring equipment, and ancillary equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including periods of startup, shutdown, transient, and commissioning operation, and periods of malfunction (ARM 17.8.340 and 40 CFR 60 Subparts A and KKKK).
- B.7. SME shall install, operate, and maintain only turbines with integrated dry low NO_x (DLN) burners to control NO_x emissions during both simple cycle and combined cycle operation, including periods of startup, shutdown, transient, and commissioning operation (ARM 17.8.752).
- B.8. SME shall utilize good combustion practices and combust only pipeline quality natural gas in each turbine to control particulate matter (PM), particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀), particulate matter with an aerodynamic diameter of 2.5 microns or less (PM_{2.5}), NO_x, and SO₂ emissions during both simple cycle and combined cycle operation, including periods of startup, shutdown, transient, and commissioning operation (ARM 17.8.340, ARM 17.8.752, and 40 CFR 60, Subpart KKKK).
- B.9. SME shall comply with all applicable standards and limitations, and the monitoring, reporting, recordkeeping, and notification requirements of the Acid Rain Program contained in 40 CFR Parts 72-78 (40 CFR Part 72 through 40 CFR Part 78).
- B.10. For any request to increase the allowable hours of operation in simple cycle mode, or to change fuel quality or quantity which may cause an increase in short or long-term emissions, SME shall submit a full PSD permit application complete with a new proposal of the BACT as if the Highwood Generating Station gas plant had never been built (ARM 17.8.749).

Compliance Demonstration

- B.11. As required by the Department and Section III.A.1, SME shall perform a Method 9 test to monitor compliance with the opacity limit in Section III.B.1. Method 9 tests shall be performed in accordance with the Montana Source Test Protocol and Procedure Manual (ARM 17.8.106 and ARM 17.8.1213). SME shall further monitor compliance with the opacity limit in Section III.B.1 by burning pipeline quality natural gas in the turbines (ARM 17.8.749 and ARM 17.8.1213).
- B.12. Compliance with Section III.B.2 shall be monitored as follows (ARM 17.8.1213):
 - a. Within 60 days of construction of a stack, or 60 days from the final date of Operating Permit #OP4429-00, whichever is later, SME shall verify stack heights, and record the verification process and results in a log. Any changes made to stack dimensions shall be recorded in the log.
 - b. Upon existence of both simple cycle and combined cycle stacks, SME shall maintain records demonstrating that simple cycle operations emissions and combined cycle operations emissions go through the required stacks.
- B.13. Compliance with the ppm NO_x limit shall be monitored as required by 40 CFR 60, Subpart KKKK. In accord with 40 CFR 60.4340, CEMS monitoring as described in 40 CFR 60.4335(b) and 60.4345 may be used to monitor compliance (ARM 17.8.340, 40 CFR 60 Subpart KKKK, and ARM 17.8.1213).

- B.14. Compliance with the SO₂ emission limit or, in lieu of the emission limit, the fuel limitation, shall be monitored as required by 40 CFR 60, Subpart KKKK (ARM 17.8.340, 40 CFR 60 Subpart KKKK, and ARM 17.8.1213).
- B.15. Compliance with 40 CFR 60, Subpart KKKK shall be monitored as required by 40 CFR 60, Subpart KKKK (ARM 17.8.340, 40 CFR 60 Subpart KKKK, and ARM 17.8.1213).
- B.16. Compliance with good air pollution control practices shall be monitored through emissions monitoring results, through opacity observations as required by the Department, and through maintenance inspection and records (ARM 17.8.340, 40 CFR 60, Subpart A and ARM 17.8.1213).
- B.17. SME shall maintain records which exhibit the integrated dry low NO_x burners of turbines installed and operated. SME may use CEMS monitoring results and/or other methods as approved by the Department to demonstrate the ongoing operation of dry low NO_x Burners. SME shall also maintain a log of maintenance inspections and maintenance performed on the turbines (ARM 17.8.1213).
- B.18. SME shall maintain records demonstrating that only pipeline quality natural gas was burned in the turbines (ARM 17.8.1213).
- B.19. SME shall comply with all applicable standards and limitations, and the monitoring, reporting, recordkeeping, and notification requirements of the Acid Rain Program contained in 40 CFR Parts 72-78 (40 CFR Part 72 through 40 CFR Part 78).
- B.20. For any request to increase the allowable hours of operation in simple cycle mode, or to change fuel quality or quantity which may cause an increase in short or long-term emissions, SME shall submit a full Prevention of Significant Deterioration (PSD) permit application complete with a new proposal of the Best Available Control Technology (BACT) as if the Highwood Generating Station (HGS) gas plant had never been built (ARM 17.8.1213).

Recordkeeping

- B.21. All compliance source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual, and shall be maintained on site (ARM 17.8.106 and ARM 17.8.1212).
- B.22. SME shall maintain records demonstrating that only pipeline quality natural gas was burned in the turbines (ARM 17.8.1212).
- B.23. SME shall maintain the stack information records on-site and shall be made available to the Department upon request. The records shall be submitted to the Department upon request (ARM 17.8.1212).
- B.24. SME shall comply with all applicable recordkeeping requirements of 40 CFR 60, Subpart KKKK (ARM 17.8.1212, ARM 17.8.340, and 40 CFR 60, Subpart KKKK).
- B.25. SME shall maintain on-site, and available to the Department upon request, a log documenting the following operational parameters and conditions. The log shall be submitted to the Department upon request (ARM 17.8.1212):

- a. Demonstration that the dry low NO_x burners are operating properly. SME may use CEMS data and/or other methods as approved by the Department to demonstrate the operation of the dry low NO_x burners.
 - b. Records demonstrating that only pipeline quality natural gas was burned in the turbines.
- B.26. SME shall maintain on-site, and available to the Department upon request, a log documenting maintenance inspections and maintenance actions performed as follows (40 CFR 60 Subpart A and ARM 17.8.1212):
 - a. SME shall maintain a log recording the results of maintenance inspections and maintenance performed on the dry low NO_x burners.
 - b. SME shall maintain a log recording the results of maintenance inspections and maintenance performed on the turbines.
- B.27. SME shall comply with all applicable recordkeeping requirements contained in 40 CFR Part(s) 72-78. SME shall maintain all records required by the Acid Rain Program on-site and available to the Department upon request. SME shall submit a summary of any required reports to the Department along with the semiannual compliance monitoring reports (40 CFR Part 72 through 40 CFR Part 78).
- B.28. For any request to increase the allowable hours of operation in simple cycle mode, or to change fuel quality or quantity which may cause an increase in short or long-term emissions, SME shall submit a full PSD permit application complete with a new proposal of the BACT as if the HGS gas plant had never been built (ARM 17.8.1212).

Reporting

- B.29. Any compliance source test reports shall be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- B.30. SME shall comply with all applicable reporting requirements of 40 CFR 60, Subpart KKKK (ARM 17.8.340, 40 CFR 60 Subpart KKKK, and ARM 17.8.1212).
- B.31. SME shall comply with applicable reporting requirements of the Acid Rain Program in 40 CFR Part(s) 72-78 (40 CFR Part 72 through 40 CFR Part 78).
- B.32. The annual compliance certification required by Section V.B shall contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- B.33. The semiannual monitoring report shall provide (ARM 17.8.1212):
 - a. A summary of any compliance source testing completed during the semiannual period;
 - b. A summary of records demonstrating that pipeline quality natural gas was burned;
 - c. A summary of any recordkeeping made during the semiannual period regarding stack information;
 - d. A summary of records demonstrating compliance with the NO_x ppm limit;
 - e. A summary of records demonstrating compliance with the SO₂ limitation(s);
 - f. A summary of operational parameters and conditions records kept as required by Section III.B.25;
 - g. A summary of the maintenance log;
 - h. A summary of compliance with and reports required by 40 CFR 60, Subpart KKKK;

- i. A summary of compliance with and reports required by the Acid Rain Program; and
- j. A reference to any permit applications submitted to the Department within the semiannual period for which Section III.B.10 applied.

C. EU001 and EU002: Turbines - Simple Cycle Operations

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration Method	Frequency	Reporting Requirements
C.1, C.10, C.11, C.14, C.15, C.19, C.20, C.21	Simple Cycle NO _x Emissions	Startup: 36.58 lb/hr Shutdown: 36.58 lb/hr Steady State or Transient: 36.58 lb/hr	CEMS, Source Testing	Ongoing	Semiannual
C.2, C.10, C.11, C.14, C.15, C.19, C.20, C.21	Simple Cycle CO Emissions	Startup: 114.70 lb/hr Shutdown: 114.70 lb/hr Steady State or Transient: 48.96 lb/hr	CEMS, Source Testing	Ongoing	Semiannual
C.3, C.13, C.14, C.19, C.20, C.21	Simple Cycle VOC Emissions	Startup: 3.90 lb/hr Shutdown: 3.90 lb/hr Steady State or Transient: 2.03 lb/hr	Method 18/Method 25	As required by the Department and Section III.A.1	Semiannual
C.4, C.12, C.14, C.18, C.20, C.21	Simple Cycle SO ₂ Emissions	Startup: 0.57 lb/hr Shutdown: 0.57 lb/hr Steady State or Transient: 0.57 lb/hr	combustion practices and the burning of only pipeline quality natural gas	Ongoing	Semiannual
C.5, C.12, C.18, C.20, C.21	Simple Cycle PM Emissions	Startup: 4.80 lb/hr Shutdown: 4.80 lb/hr Steady State or Transient: 4.80 lb/hr	combustion practices and the burning of only pipeline quality natural gas, source testing as required by the Department	Ongoing and as required by the department	Semiannual
C.6, C.12, C.18, C.20, C.21	Simple Cycle PM ₁₀ Emissions	Startup: 4.80 lb/hr Shutdown: 4.80 lb/hr Steady State or Transient: 4.80 lb/hr	combustion practices and the burning of only pipeline quality natural gas, source testing as required by the Department	Ongoing and as required by the department	Semiannual
C.7, C.12, C.18, C.20, C.21	Simple Cycle PM _{2.5} Emissions	Startup: 4.80 lb/hr Shutdown: 4.80 lb/hr Steady State or Transient: 4.80 lb/hr	combustion practices and the burning of only pipeline quality natural gas, source testing as required by the Department	Ongoing and as required by the department	Semiannual
C.8, C.10, C.16, C.20, C.21	Simple Cycle Operation Time	3,200 hr per rolling 12-month period	CEMS and Recordkeeping	Ongoing	Semiannual
C.9, C.10, C.17, C.20, C.21	Simple Cycle Startup and Shutdown Time	1-hr Startup 1-hr Shutdown	CEMS and Recordkeeping	Ongoing	Semiannual

Conditions

- C.1. Simple cycle emissions of NO_x from each simple cycle stack shall not exceed the following limits on a one-hour basis, where averaging times and definitions of startup, shutdown, steady state, and transient operation are provided in Appendix B of this Title V Permit (ARM 17.8.752):

- a. Startup: 36.58 pound per hour (lb/hr)
 - b. Shutdown: 36.58 lb/hr
 - c. Steady State or Transient: 36.58 lb/hr
- C.2. Simple cycle emissions of CO from each simple cycle stack shall not exceed the following limits on a one-hour basis, where averaging times and definitions of startup, shutdown, steady state, and transient operation are provided in Appendix B of this Title V Permit (ARM 17.8.752):
 - a. Startup: 114.70 lb/hr
 - b. Shutdown: 114.70 lb/hr
 - c. Steady State or Transient: 48.96 lb/hr
- C.3. Simple cycle emissions of VOC from each simple cycle stack shall not exceed the following limits on a one-hour basis, where averaging times and definitions of startup, shutdown, steady state, and transient operation are provided in Appendix B of this Title V Permit (ARM 17.8.752):
 - a. Startup: 3.90 lb/hr
 - b. Shutdown: 3.90 lb/hr
 - c. Steady State or Transient: 2.03 lb/hr
- C.4. Simple cycle emissions of SO₂ from each simple cycle stack shall not exceed the following limits on a one-hour basis, where averaging times and definitions of startup, shutdown, steady state, and transient operation are provided in Appendix B of this Title V Permit (ARM 17.8.752):
 - a. Startup: 0.57 lb/hr
 - b. Shutdown: 0.57 lb/hr
 - c. Steady State or Transient: 0.57 lb/hr
- C.5. Simple cycle emissions of PM from each simple cycle stack shall not exceed the following limits on a one-hour basis, where averaging times and definitions of startup, shutdown, steady state, and transient operation are provided in Appendix B of this Title V Permit (ARM 17.8.752):
 - a. Startup: 4.80 lb/hr
 - b. Shutdown: 4.80 lb/hr
 - c. Steady State or Transient: 4.80 lb/hr
- C.6. Simple cycle emissions of PM₁₀ from each simple cycle stack shall not exceed the following limits on a one-hour basis, where averaging times and definitions of startup, shutdown, steady state, and transient operation are provided in Appendix B of this Title V Permit (ARM 17.8.752):
 - a. Startup: 4.80 lb/hr
 - b. Shutdown: 4.80 lb/hr
 - c. Steady State or Transient: 4.80 lb/hr
- C.7. Simple cycle emissions of PM_{2.5} from each simple cycle stack shall not exceed the following limits on a one-hour basis, where averaging times and definitions of startup, shutdown, steady state, and transient operation are provided in Appendix B of this Title V Permit (ARM 17.8.752):

- a. Startup: 4.80 lb/hr
 - b. Shutdown: 4.80 lb/hr
 - c. Steady State or Transient: 4.80 lb/hr
- C.8. While in simple cycle mode, conveyance or combustion of fuel in each turbine generator shall not exceed 3,200 hours per rolling 12-month period, per turbine, including periods of startup, shutdown, and transient operation (ARM 17.8.749).
- C.9. Any individual simple cycle startup shall not exceed one hour in duration, and any individual simple cycle shutdown shall not exceed one hour in duration (ARM 17.8.752).

Compliance Demonstration

- C.10. SME shall install, operate, calibrate, and maintain CEMS as follows (ARM 17.8.1213):
 - a. SME shall operate a CEMS consisting of a NO_x monitor and a diluent gas (oxygen (O₂) or carbon dioxide (CO₂)) monitor for the measurement of NO_x on each simple cycle and combined cycle stack, and use the data to monitor compliance with the NO_x emission limits and the hours of operation limits in Sections III.C.8 and III.C.9. The applicable NO_x CEMS shall be installed and certified within 180 days of initial startup following issuance of MAQP #4429-00 (ARM 17.8.105; ARM 17.8.749; 40 CFR 60, Subpart KKKK; and 40 CFR Parts 72-78). SME shall maintain emissions records which clearly distinguish simple cycle emissions from combined cycle emissions, and clearly distinguish the startup, shutdown, steady state or transient, and commissioning period emissions (ARM 17.8.1213).
 - b. SME shall operate a CEMS for the measurement of CO on each simple cycle and combined cycle stack, and use the data to monitor compliance with the CO emission limits and the hours of operation limits in Sections III.C.8 and III.C.9. The applicable CO CEMS shall be installed and certified within 180 days of initial startup following issuance of MAQP #4429-00 (ARM 17.8.105, ARM 17.8.749, and 40 CFR Parts 72-78). SME shall maintain emissions records which clearly distinguish simple cycle emissions from combined cycle emissions, and the startup, shutdown, steady state or transient, and commissioning period emissions (ARM 17.8.1213).
 - c. All continuous monitors required by this permit and by 40 CFR Part 60 shall be operated, and excess emissions reported, as per 40 CFR 60, Subpart KKKK, and performance tests conducted in accordance with the requirements of 40 CFR 60, Subpart A; 40 CFR 60, Appendix B of MAQP #4429-00 (Performance Specifications #2, #3, #4 and/or #4A); 40 CFR 60, Subpart KKKK; and 40 CFR Parts 72-78, as applicable (ARM 17.8.749; 40 CFR 60, Subpart KKKK; 40 CFR Part 60; and 40 CFR Parts 72-78).
 - d. SME shall develop and keep on-site a quality assurance plan for all CEMS (ARM 17.8.340 and 40 CFR 60, Subpart KKKK).
 - e. On-going quality assurance for the CEMS shall conform to 40 CFR 60, Appendix F (ARM 17.8.749 and 40 CFR Part 60, Appendix F).
 - f. SME shall maintain a file of all measurements from the CEMS and performance testing measurements, including: all CEMS performance evaluations; all CEMS or monitoring device calibration checks and audits; all adjustments and maintenance performed on these systems or devices. These shall be recorded in a permanent form suitable for inspection

and shall be retained on-site for at least 5 years following the date of such measurements and reports. SME shall supply these records to the Department upon request (ARM 17.8.749).

- C.11. For simple cycle operation, SME shall test each turbine generator in simple cycle mode using natural gas to demonstrate compliance with the steady state NO_x and CO emission limits. Testing shall be conducted concurrently for NO_x and CO within 180 days of initial start-up of each generating unit, and shall conform with the requirements contained in 40 CFR 60, Subpart KKKK. After the initial testing, each generating unit shall be tested annually and the time between tests shall not exceed 14 months since the previous performance test. The Department may approve another testing/monitoring schedule (ARM 17.8.105, ARM 17.8.749, 40 CFR 60, Subpart KKKK, and ARM 17.8.1213).
- C.12. Compliance with simple cycle SO₂, PM, PM₁₀, and PM_{2.5} emissions limitations on the turbines shall be demonstrated through good combustion practices and the burning of only pipeline quality natural gas in the turbines (ARM 17.8.1213).

Compliance shall be further monitored through testing as required by the Department and Section III.A.1 (ARM 17.8.1213):

- a. As required by the Department and Section III.A.1, for simple cycle operation, SME shall conduct Method 5 and Method 202 tests on each turbine generator in simple cycle mode combusting natural gas to demonstrate compliance with the steady state PM, PM₁₀, and PM_{2.5} emission limits contained in Section III.C.1.
 - b. SME shall use alternate test methods as approved or requested in writing by the Department.
- C.13. As required by the Department and Section III.A.1, SME shall perform a Method 18/Method 25 test in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106) to monitor compliance with VOC emissions limitations (ARM 17.8.1213).

Recordkeeping

- C.14. All compliance source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual, and shall be maintained on site (ARM 17.8.106 and ARM 17.8.1212).
- C.15. SME shall maintain on-site, and available to the Department upon request, a log documenting the emissions data as required by the CEMS condition of Section III.C.10. Records shall clearly indicate the simple cycle emissions, and startup, shutdown, and steady state / transient emissions (ARM 17.8.1212).
- C.16. SME shall maintain on-site, and available to the Department upon request, a log of the rolling 12-month hours of operation in simple cycle mode. By the 25th day of each month, SME shall calculate and record the total hours of operation in simple-cycle mode (determined from CEMS data), and calculate and record the rolling 12-month sum (ARM 17.8.1212).
- C.17. SME shall maintain a log recording (determined from CEMS data) (ARM 17.8.1212):
- a. The date and time that each turbine start-up event begins and ends, with duration of each startup event noted.
 - b. The date and time that each turbine shut-down event begins and ends, with duration of each shutdown event noted.

- C.18. SME shall maintain records demonstrating the burning of only pipeline quality natural gas in the turbines (ARM 17.8.1212).

Reporting

- C.19. Any compliance source test reports shall be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- C.20. The annual compliance certification required by Section V.B shall contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- C.21. The semiannual monitoring report shall provide (ARM 17.8.1212):
- A summary of any compliance source testing completed during the semiannual period;
 - A summary of CEMS data presented so as to demonstrate compliance status with emissions limitations;
 - A summary of the monthly simple cycle hours of operation and 12-month rolling sums;
 - The records demonstrating compliance status with the simple cycle startup and shutdown duration limits; and
 - A summary of records maintained to demonstrate that pipeline quality natural gas was burned in the turbines.

D. EU001 and EU002: Turbines - Combined Cycle Operations

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration Method	Frequency	Reporting Requirements
D.1, D.13, D.20, D.27, D.28	Combined cycle commissioning period	16 weeks	Recordkeeping	Ongoing	Semiannual
D.2, D.14, D.15, D.21, D.22, D.26, D.27, D.28	Combined cycle emissions of NO _x	Startup: 26.12 lb/hr Shutdown: 12.33 lb/hr Steady State or Transient: 4.16 lb/hr Commissioning: 36.58 lb/hr	CEMS, Source Testing, Recordkeeping	Ongoing	Semiannual
D.3, D.14, D.15, D.21, D.22, D.26, D.27, D.28	Combined cycle emissions of CO	Startup: 76.20 lb/hr Shutdown: 4.15 lb/hr Steady State or Transient: 2.03 lb/hr Commissioning: 114.70 lb/hr	CEMS, Source Testing, Recordkeeping	Ongoing	Semiannual
D.4, D.17, D.22, D.26, D.27, D.28	Combined cycle emissions of VOC	Startup: 1.86 lb/hr Shutdown: 1.86 lb/hr Steady State or Transient: 1.86 lb/hr Commissioning: 3.90 lb/hr	Source Testing	As required by the Department and Section III.A.1	Semiannual
D.5, D.16, D.24, D.27, D.28	Combined cycle emissions of SO ₂	Startup: 0.69 lb/hr Shutdown: 0.69 lb/hr Steady State or Transient: 0.69 lb/hr Commissioning: 0.69 lb/hr	combustion practices and burning only pipeline quality natural gas, recordkeeping	Ongoing	Semiannual
D.6, D.16, D.22, D.24, D.26, D.27, D.28	Combined cycle emissions of PM	Startup: 7.20 lb/hr Shutdown: 7.20 lb/hr Steady State or Transient: 7.20 lb/hr Commissioning: 7.20 lb/hr	combustion practices and burning only pipeline quality natural gas, recordkeeping, source testing as required by the Department	Ongoing and as required by the Department	Semiannual

D.7, D.16, D.22, D.24, D.26, D.27, D.28	Combined cycle emissions of PM ₁₀	Startup: 7.20 lb/hr Shutdown: 7.20 lb/hr Steady State or Transient: 7.20 lb/hr Commissioning: 7.20 lb/hr	combustion practices and burning only pipeline quality natural gas, recordkeeping, source testing as required by the Department	Ongoing and as required by the Department	Semiannual
D.8, D.16, D.22, D.24, D.26, D.27, D.28	Combined cycle emissions of PM _{2.5}	Startup: 7.20 lb/hr Shutdown: 7.20 lb/hr Steady State or Transient: 7.20 lb/hr Commissioning: 7.20 lb/hr	combustion practices and burning only pipeline quality natural gas, recordkeeping, source testing as required by the Department	Ongoing and as required by the Department	Semiannual
D.9, D.14, D.23, D.27, D.28	Combined Cycle Startup and Shutdown Time	Startup: 1,460 hr/rolling 12-month period Shutdown: 730 hr/rolling 12-month period	CEMS and recordkeeping	Ongoing	Semiannual
D.10, D.14, D.24, D.27, D.28	Combined Cycle Startup and Shutdown Time	2 hrs startup 1 hr shutdown	CEMS and recordkeeping	Ongoing	Semiannual
D.11, D.18, D.24, D.25, D.27, D.28	CO and VOC	Catalytic Oxidizer on each turbine: w/in 2 hr of startup and until 1hr or less prior to shutdown	Recordkeeping	Ongoing	Semiannual
D.12, D.19, D.25, D.27, D.28	NO _x	Selective Catalytic Reduction System – Combined Cycle Operations: w/in 2hr of startup and until 1hr or less prior to shutdown	Recordkeeping	Ongoing	Semiannual

Conditions

- D.1. A combined cycle commissioning period (as defined in Appendix B of this Title V Permit) is provided for the combined cycle operation of any individual turbine, and shall not exceed 16 weeks in duration (ARM 17.8.749).
- D.2. Combined cycle emissions of NO_x from each combined cycle stack shall not exceed the following limits on a one-hour basis, where averaging times and definitions of startup, shutdown, steady state, transient, and commissioning operation are in Appendix B of this Title V Permit (ARM 17.8.752):
- Startup: 26.12 lb/hr
 - Shutdown: 12.33 lb/hr
 - Steady State or Transient: 4.16 lb/hr
 - Commissioning: 36.58 lb/hr
- D.3. Combined cycle emissions of CO from each combined cycle stack shall not exceed the following limits on a one-hour basis, where averaging times and definitions of startup, shutdown, steady state, transient, and commissioning operation are in Appendix B of this Title V Permit (ARM 17.8.752):
- Startup: 76.20 lb/hr
 - Shutdown: 4.15 lb/hr
 - Steady State or Transient: 2.03 lb/hr
 - Commissioning: 114.70 lb/hr

- D.4. Combined cycle emissions of VOC from each combined cycle stack shall not exceed the following limits on a one-hour basis, where averaging times and definitions of startup, shutdown, steady state, transient, and commissioning operation are provided in Appendix B of this Title V Permit (ARM 17.8.752):
- a. Startup: 1.86 lb/hr
 - b. Shutdown: 1.86 lb/hr
 - c. Steady State or Transient: 1.86 lb/hr
 - d. Commissioning: 3.90 lb/hr
- D.5. Combined cycle emissions of SO₂ from each combined cycle stack shall not exceed the following limits on a one-hour basis, where averaging times and definitions of startup, shutdown, steady state, transient, and commissioning operation are provided in Appendix B of this Title V Permit (ARM 17.8.752):
- a. Startup: 0.69 lb/hr
 - b. Shutdown: 0.69 lb/hr
 - c. Steady State or Transient: 0.69 lb/hr
 - d. Commissioning: 0.69 lb/hr
- D.6. Combined cycle emissions of PM from each combined cycle stack shall not exceed the following limits on a one-hour basis, where averaging times and definitions of startup, shutdown, steady state, transient, and commissioning operation are provided in Appendix B of this Title V Permit (ARM 17.8.752):
- a. Startup: 7.20 lb/hr
 - b. Shutdown: 7.20 lb/hr
 - c. Steady State or Transient: 7.20 lb/hr
 - d. Commissioning: 7.20 lb/hr
- D.7. Combined cycle emissions of PM₁₀ from each combined cycle stack shall not exceed the following limits on a one-hour basis, where averaging times and definitions of startup, shutdown, steady state, transient, and commissioning operation are provided in Appendix B of this Title V Permit (ARM 17.8.752):
- a. Startup: 7.20 lb/hr
 - b. Shutdown: 7.20 lb/hr
 - c. Steady State or Transient: 7.20 lb/hr
 - d. Commissioning: 7.20 lb/hr
- D.8. Combined cycle emissions of PM_{2.5} from each combined cycle stack shall not exceed the following limits on a one-hour basis, where averaging times and definitions of startup, shutdown, steady state, transient, and commissioning operation are provided in Appendix B of this Title V Permit (ARM 17.8.752):
- a. Startup: 7.20 lb/hr
 - b. Shutdown: 7.20 lb/hr
 - c. Steady State or Transient: 7.20 lb/hr
 - d. Commissioning: 7.20 lb/hr

- D.9. While in combined cycle mode, conveyance or combustion of fuel in each turbine generator shall not exceed 1,460 startup hours and 730 shutdown hours per rolling 12-month period, per turbine (ARM 17.8.749).
- D.10. Any individual combined cycle startup shall not exceed 2 hours in duration, and any individual combined cycle shutdown shall not exceed one hour in duration (ARM 17.8.752).
- D.11. SME shall install, operate, and maintain a catalytic oxidizer on each turbine to control CO and VOC emissions during combined cycle operation, including periods of startup, shutdown, transient, and commissioning operation. The catalytic oxidizer shall commence operation within 2 hours of turbine startup and shall continue until 1 hour or less prior to shutdown (ARM 17.8.752).
- D.12. SME shall install, operate, and maintain an SCR system on each turbine to control NO_x emissions during combined cycle operation, including periods of startup, shutdown, transient, and commissioning operation. The SCR shall commence operation within 2 hours of turbine startup and shall continue until 1 hour or less prior to shutdown (ARM 17.8.752).

Compliance Demonstration

- D.13. SME shall keep records, by turbine, indicating the qualifying event which starts a commissioning period, that commissioning period start date, the emissions during that period, and the commissioning period stop date. Emissions data shall be obtained through use of a CEMS, operated as required by Section III.D.14 (ARM 17.8.1213).
- D.14. SME shall install, operate, calibrate, and maintain CEMS as follows (ARM 17.8.1213):
- a. SME shall operate a CEMS consisting of a NO_x monitor and a diluent gas (O₂ or CO₂) monitor for the measurement of NO_x on each simple cycle and combined cycle stack, and use the data to monitor compliance with the NO_x emission limits and the hours of operation limits in Sections III.D.9 and III.D.10. The applicable NO_x CEMS shall be installed and certified within 180 days of initial startup following issuance of MAQP #4429-00 (ARM 17.8.105; ARM 17.8.749; 40 CFR 60, Subpart KKKK; and 40 CFR Parts 72-78). SME shall maintain emissions records which clearly distinguish simple cycle emissions from combined cycle emissions, and clearly distinguish the startup, shutdown, steady state or transient, and commissioning period emissions (ARM 17.8.1213).
 - b. SME shall operate a CEMS for the measurement of CO on each simple cycle and combined cycle stack, and use the data to monitor compliance with the CO emission limits and the hours of operation limits in Sections III.D.9 and III.D.10. The applicable CO CEMS shall be installed and certified within 180 days of initial startup following issuance of MAQP #4429-00 (ARM 17.8.105, ARM 17.8.749, and 40 CFR Parts 72-78). SME shall maintain emissions records which clearly distinguish simple cycle emissions from combined cycle emissions, and the startup, shutdown, steady state or transient, and commissioning period emissions (ARM 17.8.1213).
 - c. All continuous monitors required by this permit and by 40 CFR Part 60 shall be operated, and excess emissions reported, as per 40 CFR 60, Subpart KKKK, and performance tests conducted in accordance with the requirements of 40 CFR 60, Subpart A; 40 CFR 60, Appendix B (Performance Specifications 2, 3, 4 and/or 4A); 40 CFR 60, Subpart KKKK; and 40 CFR Parts 72-78, as applicable (ARM 17.8.749; 40 CFR 60, Subpart KKKK; 40 CFR Part 60; and 40 CFR Parts 72-78).

- d. SME shall develop and keep on-site a quality assurance plan for all CEMS (ARM 17.8.340 and 40 CFR 60, Subpart KKKK).
 - e. On-going quality assurance for the CEMS shall conform to 40 CFR 60, Appendix F (ARM 17.8.749 and 40 CFR 60, Appendix F).
 - f. SME shall maintain a file of all measurements from the CEMS and performance testing measurements, including: all CEMS performance evaluations; all CEMS or monitoring device calibration checks and audits; all adjustments and maintenance performed on these systems or devices. These shall be recorded in a permanent form suitable for inspection and shall be retained on-site for at least 5 years following the date of such measurements and reports. SME shall supply these records to the Department upon request (ARM 17.8.749).
- D.15. For combined cycle operation, SME shall test each turbine generator in combined cycle mode using natural gas to demonstrate compliance with the steady state NO_x and CO emission limits. Testing shall be conducted concurrently for NO_x and CO within 180 days of initial start-up of each generating unit, and shall conform with the requirements contained in 40 CFR 60, Subpart KKKK. After the initial testing, each generating unit shall be tested annually and the time between tests shall not exceed 14 months since the previous performance test. The Department may approve another testing/monitoring schedule (ARM 17.8.105, ARM 17.8.749, 40 CFR 60, Subpart KKKK, and ARM 17.8.1213).
- D.16. Compliance with combined cycle SO₂, PM, PM₁₀, and PM_{2.5} emissions limitations on the turbines shall be demonstrated through good combustion practices and the burning of only pipeline quality natural gas in the turbines (ARM 17.8.1213). Compliance shall be further monitored through testing as required by the Department and Section III.A.1:
- a. As required by the Department and Section III.A.1, for combined cycle operation, SME shall conduct Method 5 and Method 202 tests on each turbine generator in combined cycle mode using natural gas to demonstrate compliance with the steady state PM, PM₁₀, and PM_{2.5} emission limits.
 - b. SME shall use alternate test methods as approved or requested in writing by the Department (ARM 17.8.1213).
- D.17. As required by the Department and Section III.A.1, SME shall perform a Method 18/Method 25 test in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106) to monitor compliance with VOC emissions limitations (ARM 17.8.1213).
- D.18. SME shall maintain records which exhibit the catalytic oxidizer installed on each turbine. Any operation during which there is deviation of the use of the catalytic oxidizer(s) or malfunction of the catalytic oxidizer(s) shall be recorded in a log, indicating date and timeframe, with any associated startup time and shutdown time noted as applicable. SME shall also maintain a log of maintenance inspections and maintenance performed on the catalytic oxidizers (ARM 17.8.1213).
- D.19. SME shall maintain records which exhibit the selective catalytic reduction system installed on each turbine. Any operation during which there is deviation of the use of the selective catalytic oxidation system(s) or malfunction of the selective catalytic oxidation system(s) shall be recorded in a log indicating date and timeframe, with any associated startup time and shutdown time noted as applicable. SME shall also maintain a log of inspections and maintenance performed on the selective catalytic reduction systems (ARM 17.8.1213).

Recordkeeping

- D.20. SME shall maintain commissioning period records on-site, and shall be made available to the Department upon request. The records shall be submitted to the Department upon request. Commissioning period records (or copies of the relevant data) shall be maintained in a separate, distinct record (ARM 17.8.1212).
- D.21. SME shall maintain on-site, and available to the Department upon request, a log documenting the emissions data as required by the CEMS condition of Section III.D.14. Records shall clearly indicate the combined cycle emissions, and clearly indicate the startup, shutdown, commissioning period, and steady state / transient emissions (ARM 17.8.1212).
- D.22. All compliance source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual, and shall be maintained on site (ARM 17.8.106 and ARM 17.8.1212).
- D.23. SME shall maintain on-site, and available to the Department upon request, a log of the rolling 12-month hours of operation in combined cycle startup and combined cycle shutdown (as determined from CEMS data). By the 25th day of each month, SME shall calculate and record the total hours of operation in combined cycle startup and combined cycle shutdown, and calculate and record the rolling 12-month sums (40 CFR 60, Subpart A and ARM 17.8.1212).
- D.24. SME shall maintain on-site, and available to the Department upon request, a log documenting the following combined cycle operational parameters and conditions. The log shall be submitted to the Department upon request (ARM 17.8.1212):
- a. Date, time, and duration of operation of each turbine, during which, a catalytic oxidation control system was malfunctioning or not operated;
 - b. Date, time, and duration of operation of each turbine, during which, a selective catalytic oxidation system was malfunctioning or not operated;
 - c. Date and time that each combined cycle start-up event begins and ends (as determined from CEMS data), with duration noted;
 - d. Date and time that each combined cycle shut-down event begins and ends (as determined from CEMS data), with duration noted;
 - e. Records demonstrating that only pipeline quality natural gas was burned in the turbines.
- D.25. SME shall maintain on-site, and available to the Department upon request, a log documenting maintenance inspections and maintenance actions performed as follows (40 CFR 60, Subpart A and ARM 17.8.1212):
- a. SME shall maintain a log recording the results of oxidation catalyst inspections and any maintenance performed. Each log entry shall include the date, the time, the results of the inspection, summary of maintenance performed, and the initial(s) of the documenting personnel;
 - b. SME shall maintain a log recording the results of the selective catalytic reduction system inspections and any maintenance performed. Each log entry shall include the date, the time, the results of the inspection, summary of maintenance performed, and the initial(s) of the documenting personnel.

Reporting

- D.26. Any compliance source test reports shall be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- D.27. The annual compliance certification required by Section V.B shall contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- D.28. The semiannual monitoring report shall provide (ARM 17.8.1212):
- A summary of any commissioning period recordkeeping;
 - A summary of any compliance source testing completed during the semiannual period;
 - A summary of CEMS data presented so as to demonstrate compliance status with emissions limitations;
 - A summary of the log of operational parameters and conditions;
 - The monthly combined cycle hours of operation and 12-month rolling sums; and
 - A brief summary of maintenance records made.

E. EU003 and EU004: Emergency Generator Engine and Fire Pump Engine

2,206 bhp diesel-fired emergency generator engine and 343 bhp fire pump engine

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration Method Frequency		Reporting Requirements
E.1, E.5, E.8, E.11, E.14	Emergency generator engine	500 hrs per rolling 12 month period	Recordkeeping	Ongoing	Semiannual
E.2, E.5, E.8, E.11, E.14	Fire pump engine	500 hrs per rolling 12 month period	Recordkeeping	Ongoing	Semiannual
E.3, E.6, E.9, E.11, E.12, E.14	40 CFR 60, Subpart IIII	40 CFR 60, Subpart IIII	40 CFR 60, Subpart IIII	40 CFR 60, Subpart IIII	40 CFR 60, Subpart IIII
E.3, E.7, E.10, E.11, E.13, E.14	40 CFR 63, Subpart ZZZZ	40 CFR 63, Subpart ZZZZ	40 CFR 63, Subpart ZZZZ	40 CFR 63, Subpart ZZZZ	40 CFR 63, Subpart ZZZZ

Conditions

- E.1. Operation of the 2,206 bhp diesel fired emergency generator (1,500 kilowatt generator output) shall not exceed 500 hours per unit per rolling 12-month period (ARM 17.8.749 and ARM 17.8.752).
- E.2. Operation of the 343 bhp fire pump shall not exceed 500 hours per unit per rolling 12-month period (ARM 17.8.749 and ARM 17.8.752).
- E.3. SME shall comply with applicable requirements of 40 CFR 60, Subpart IIII (ARM 17.8.340 and 40 CFR 60, Subpart IIII).
- E.4. SME shall comply with applicable requirements of 40 CFR 63, Subpart ZZZZ (ARM 17.8.342 and 40 CFR 63, Subpart ZZZZ).

Compliance Demonstration

- E.5. SME shall record operation time of the emergency generator engine and the fire pump engine, including maintenance related operating time (ARM 17.8.1213).

- E.6. SME shall demonstrate compliance with 40 CFR 60, Subpart IIII as required by 40 CFR 60, Subpart IIII (ARM 17.8.340 and 40 CFR 60, Subpart IIII).
- E.7. SME shall demonstrate compliance with 40 CFR 63, Subpart ZZZZ as required by 40 CFR 63, Subpart ZZZZ (ARM 17.8.342 and 40 CFR 60, Subpart ZZZZ).

Recordkeeping

- E.8. The records required by Section III.E.5 shall be maintained on-site and made available to the Department upon request. By the 25th day of each month, SME shall record the hours of operation of the emergency generator engine and the fire pump engine for the previous month, and calculate and record the rolling 12-month sums (ARM 17.8.1212).
- E.9. SME shall comply with the applicable recordkeeping requirements of 40 CFR 60, Subpart IIII (ARM 17.8.340 and 40 CFR 60, Subpart IIII).
- E.10. SME shall comply with the applicable recordkeeping requirements of 40 CFR 63, Subpart ZZZZ (ARM 17.8.342 and 40 CFR 60, Subpart ZZZZ).

Reporting

- E.11. The annual compliance certification required by Section V.B shall contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- E.12. SME shall comply with the applicable reporting requirements of 40 CFR 60, Subpart IIII (ARM 17.8.340 and 40 CFR 60, Subpart IIII).
- E.13. SME shall comply with the applicable reporting requirements of 40 CFR 63, Subpart ZZZZ (ARM 17.8.342 and 40 CFR 60, Subpart ZZZZ).
- E.14. The semiannual monitoring report shall provide (ARM 17.8.1212):
- The hours of operation and rolling 12 month sum records required by Section III.E.8;
 - A summary of compliance with 40 CFR 60, Subpart IIII; and
 - A summary of compliance with 40 CFR 63, Subpart ZZZZ.

F. EU005: Fugitive Dust Emissions

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
F.1, F.2, F.3, F.4, F.5	Particulate Matter: unpaved roads and areas	Water and/or chemical dust suppression	Recordkeeping	Ongoing	Semiannual

Conditions

- F.1. SME shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308).

Compliance Demonstration

- F.2. SME shall treat all unpaved portions of haul roads, access roads, parking lots, or general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the reasonable precautions limitation of Section III.F.1 (ARM 17.8.749 and ARM 17.8.1213)).

Recordkeeping

- F.3. SME shall maintain on-site and available to the Department upon request, a log of actions taken as required by Section III.F.2. The records shall include the date of any actions taken and shall be submitted to the Department upon request (ARM 17.8.1212).

Reporting

- F.4. The annual compliance certification required by Section V.B shall contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- F.5. The semiannual monitoring report shall provide a summary of the records kept as required by Section III.F.3 (ARM 17.8.1212).

SECTION IV. NON-APPLICABLE REQUIREMENTS

SME's application identified certain Air Quality Administrative Rules of Montana (ARM) and Federal Regulations as not applicable to the facility or to a specific emissions unit at the time of application. Non-applicable rules are listed below (ARM 17.8.1214). The following list does not preclude the need to comply with any new requirements that may become applicable during the permit term. Rules identified as non-applicable in the application, which the Department determined a shield inappropriate for, are contained in the technical review document.

A. Facility-Wide

The following table contains non-applicable requirements which are administrated by the Air Resources Management Bureau of the Department of Environmental Quality.

Rule Citation	Reason
40 CFR 68 – Chemical Accident Prevention Provisions	The concentration of ammonia proposed to be used (19% - below the 20% concentration listed) and the total storage amount of ammonia proposed to be stored (two 10,000 gallon tanks – below the 20,000 lbs threshold) are below the threshold value listed in 40 CFR 68.130

B. Emission Units

The permit application identified applicable requirements: non-applicable requirements for individual or specific emission units were not listed. The Department has listed all non-applicable requirements in Section IV.A, these requirements relate to each specific unit, as well as facility wide.

SECTION V. GENERAL PERMIT CONDITIONS

A. Compliance Requirements

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(a)-(c)&(e), §1206(6)(c)&(b)

1. The permittee shall comply with all conditions of the permit. Any noncompliance with the terms or conditions of the permit constitutes a violation of the Montana Clean Air Act, and may result in enforcement action, permit modification, revocation and reissuance, or termination, or denial of a permit renewal application under ARM Title 17, Chapter 8, Subchapter 12.
2. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
3. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. If appropriate, this factor may be considered as a mitigating factor in assessing a penalty for noncompliance with an applicable requirement if the source demonstrates that both the health, safety or environmental impacts of halting or reducing operations would be more serious than the impacts of continuing operations, and that such health, safety or environmental impacts were unforeseeable and could not have otherwise been avoided.
4. The permittee shall furnish to the Department, within a reasonable time set by the Department (not to be less than 15 days), any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Department copies of those records that are required to be kept pursuant to the terms of the permit. This subsection does not impair or otherwise limit the right of the permittee to assert the confidentiality of the information requested by the Department, as provided in 75-2-105, MCA.
5. Any schedule of compliance for applicable requirements with which the source is not in compliance with at the time of permit issuance shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it was based.
6. For applicable requirements that will become effective during the permit term, the source shall meet such requirements on a timely basis unless a more detailed plan or schedule is required by the applicable requirement or the Department.

B. Certification Requirements

ARM 17.8, Subchapter 12, Operating Permit Program §1207 and §1213(7)(a)&(c)-(d)

1. Any application form, report, or compliance certification submitted pursuant to ARM Title 17, Chapter 8, Subchapter 12, shall contain certification by a responsible official of truth, accuracy and completeness. This certification and any other certification required under ARM Title 17, Chapter 8, Subchapter 12, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

2. Compliance certifications shall be submitted by February 15 of each year, or more frequently if otherwise specified in an applicable requirement or elsewhere in the permit. Each certification shall include the required information for the previous calendar year (i.e., January 1 – December 31).
3. Compliance certifications shall include the following:
 - a. The identification of each term or condition of the permit that is the basis of the certification;
 - b. The identification of the method(s) or other means used by the owner or operator for determining the status of compliance with each term and condition during the certification period, consistent with ARM 17.8.1212;
 - c. The status of compliance with each term and condition for the period covered by the certification, *including whether compliance during the period was continuous or intermittent* (based on the method or means identified in ARM 17.8.1213(7)(c)(ii), as described above); and
 - d. Such other facts as the Department may require to determine the compliance status of the source.
4. All compliance certifications shall be submitted to the Environmental Protection Agency, as well as to the Department, at the addresses listed in the Notification Addresses Appendix of this permit.

C. Permit Shield

ARM 17.8, Subchapter 12, Operating Permit Program §1214(1)-(4)

1. The applicable requirements and non-federally enforceable requirements are included and specifically identified in this permit and the permit includes a precise summary of the requirements not applicable to the source. Compliance with the conditions of the permit shall be deemed compliance with any applicable requirements and any non-federally enforceable requirements as of the date of permit issuance.
2. The permit shield described in 1 above shall remain in effect during the appeal of any permit action (renewal, revision, reopening, or revocation and reissuance) to the Board of Environmental Review (Board), until such time as the Board renders its final decision.
3. Nothing in this permit alters or affects the following:
 - a. The provisions of Sec. 7603 of the FCAA, including the authority of the administrator under that section;
 - b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
 - c. The applicable requirements of the Acid Rain Program, consistent with Sec. 7651g(a) of the FCAA;
 - d. The ability of the administrator to obtain information from a source pursuant to Sec. 7414 of the FCAA;

- e. The ability of the Department to obtain information from a source pursuant to the Montana Clean Air Act, Title 75, Chapter 2, MCA;
 - f. The emergency powers of the Department under the Montana Clean Air Act, Title 75, Chapter 2, MCA; and
 - g. The ability of the Department to establish or revise requirements for the use of reasonably available control technology (RACT) as defined in ARM Title 17, Chapter 8. However, if the inclusion of a RACT into the permit pursuant to ARM Title 17, Chapter 8, Subchapter 12, is appealed to the Board, the permit shield, as it applies to the source's existing permit, shall remain in effect until such time as the Board has rendered its final decision.
- 4. Nothing in this permit alters or affects the ability of the Department to take enforcement action for a violation of an applicable requirement or permit term demonstrated pursuant to ARM 17.8.106, Source Testing Protocol.
 - 5. Pursuant to ARM 17.8.132, for the purpose of submitting a compliance certification, nothing in these rules shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a source would have been in compliance. However, when compliance or noncompliance is demonstrated by a test or procedure provided by permit or other applicable requirements, the source shall then be presumed to be in compliance or noncompliance unless that presumption is overcome by other relevant credible evidence.
 - 6. The permit shield will not extend to minor permit modifications or changes not requiring a permit revision (see Sections I & J).
 - 7. The permit shield will extend to significant permit modifications and transfer or assignment of ownership (see Sections K & O).

D. Monitoring, Recordkeeping, and Reporting Requirements

ARM 17.8, Subchapter 12, Operating Permit Program §1212(2)&(3)

- 1. Unless otherwise provided in this permit, the permittee shall maintain compliance monitoring records that include the following information:
 - a. The date, place as defined in the permit, and time of sampling or measurement;
 - b. The date(s) analyses were performed;
 - c. The company or entity that performed the analyses;
 - d. The analytical techniques or methods used;
 - e. The results of such analyses; and
 - f. The operating conditions at the time of sampling or measurement.
- 2. The permittee shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. All monitoring data, support information, and required reports and summaries may be maintained in computerized form at the plant site if the information is

made available to Department personnel upon request, which may be for either hard copies or computerized format. Strip-charts shall be maintained in their original form at the plant site and shall be made available to Department personnel upon request.

3. The permittee shall submit to the Department, at the addresses located in the Notification Addresses Appendix of this permit, reports of any required monitoring by February 15 and August 15 of each year, or more frequently if otherwise specified in an applicable requirement or elsewhere in the permit. The monitoring report submitted on February 15 of each year shall include the required monitoring information for the period of July 1 through December 31 of the previous year. The monitoring report submitted on August 15 of each year shall include the required monitoring information for the period of January 1 through June 30 of the current year. All instances of deviations from the permit requirements shall be clearly identified in such reports. All required reports shall be certified by a responsible official, consistent with ARM 17.8.1207.

E. Prompt Deviation Reporting

ARM 17.8, Subchapter 12, Operating Permit Program §1212(3)(c)

The permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. To be considered prompt, deviations shall be reported to the Department within the following timeframes (unless otherwise specified in an applicable requirement):

1. For deviations which may result in emissions potentially in violation of permit limitations:
 - a. An initial phone notification (or faxed or electronic notification) describing the incident within 24 hours (or the next business day) of discovery; and,
 - b. A follow-up written, faxed, or electronic report within 30 days of discovery of the deviation that describes the probable cause of the reported deviation and any corrective actions or preventative measures taken.
2. For deviations attributable to malfunctions, deviations shall be reported to the Department in accordance with the malfunction reporting requirements under ARM 17.8.110; and
3. For all other deviations, deviations shall be reported to the Department via a written, faxed, or electronic report within 90 days of discovery (as determined through routine internal review by the permittee).

Prompt deviation reports do not need to be resubmitted with regular semiannual (or other routine) reports, but may be referenced by the date of submittal.

F. Emergency Provisions

ARM 17.8, Subchapter 12, Operating Permit Program §1201(13) and §1214(5), (6)&(8)

1. An “emergency” means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation and causes the source to exceed a technology-based emission limitation under this permit due to the unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of reasonable preventive maintenance, careless or improper operation, or operator error.

2. An emergency constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the permittee demonstrates through properly signed, contemporaneous logs, or other relevant evidence, that:
 - a. An emergency occurred and the permittee can identify the cause(s) of the emergency;
 - b. The permitted facility was at the time being properly operated;
 - c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in the permit; and
 - d. The permittee submitted notice of the emergency to the Department within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice fulfills the requirements of ARM 17.8.1212(3)(c). This notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
3. These emergency provisions are in addition to any emergency, malfunction or upset provision contained in any applicable requirement.

G. Inspection and Entry

ARM 17.8, Subchapter 12, Operating Permit Program §1213(3)&(4)

1. Upon presentation of credentials and other requirements as may be required by law, the permittee shall allow the Department, the administrator, or an authorized representative (including an authorized contractor acting as a representative of the Department or the administrator) to perform the following:
 - a. Enter the premises where a source required to obtain a permit is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
 - c. Inspect at reasonable times any facilities, emission units, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
 - d. As authorized by the Montana Clean Air Act and rules promulgated thereunder, sample or monitor, at reasonable times, any substances or parameters at any location for the purpose of assuring compliance with the permit or applicable requirements.
2. The permittee shall inform the inspector of all workplace safety rules or requirements at the time of inspection. This section shall not limit in any manner the Department's statutory right of entry and inspection as provided for in 75-2-403, MCA.

H. Fee Payment

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(f) and ARM 17.8, Subchapter 5, Air Quality Permit Application, Operation, and Open Burning Fees §505(3)-(5) (STATE ONLY)

1. The permittee must pay application and operating fees, pursuant to ARM Title 17, Chapter 8, Subchapter 5.
2. Annually, the Department shall provide the permittee with written notice of the amount of the fee and the basis for the fee assessment. The air quality operation fee is due 30 days after receipt of the notice, unless the fee assessment is appealed pursuant to ARM 17.8.511. If any portion of the fee is not appealed, that portion of the fee that is not appealed is due 30 days after receipt of the notice. Any remaining fee, which may be due after the completion of an appeal, is due immediately upon issuance of the Board's decision or upon completion of any judicial review of the Board's decision.
3. If the permittee fails to pay the required fee (or any required portion of an appealed fee) within 90 days of the due date of the fee, the Department may impose an additional assessment of 15% of the fee (or any required portion of an appealed fee) or \$100, whichever is greater, plus interest on the fee (or any required portion of an appealed fee), computed at the interest rate established under 15-31-510(3), MCA.

I. Minor Permit Modifications

ARM 17.8, Subchapter 12, Operating Permit Program §1226(3)&(11)

1. An application for a minor permit modification need only address in detail those portions of the permit application that require revision, updating, supplementation, or deletion, and may reference any required information that has been previously submitted.
2. The permit shield under ARM 17.8.1214 will not extend to any minor modifications processed pursuant to ARM 17.8.1226.

J. Changes Not Requiring Permit Revision

ARM 17.8, Subchapter 12, Operating Permit Program §1224(1)-(3), (5)&(6)

1. The permittee is authorized to make changes within the facility as described below, provided the following conditions are met:
 - a. The proposed changes do not require the permittee to obtain a Montana Air Quality Permit under ARM Title 17, Chapter 8, Subchapter 7;
 - b. The proposed changes are not modifications under Title I of the FCAA, or as defined in ARM Title 17, Chapter 8, Subchapters 8, 9, or 10;
 - c. The emissions resulting from the proposed changes do not exceed the emissions allowable under this permit, whether expressed as a rate of emissions or in total emissions;
 - d. The proposed changes do not alter permit terms that are necessary to enforce applicable emission limitations on emission units covered by the permit; and
 - e. The facility provides the administrator and the Department with written notification at least 7 days prior to making the proposed changes.

2. The permittee and the Department shall attach each notice provided pursuant to 1.e above to their respective copies of this permit.
3. Pursuant to the conditions above, the permittee is authorized to make Section 502(b)(10) changes, as defined in ARM 17.8.1201(30), without a permit revision. For each such change, the written notification required under 1.e above shall include a description of the change within the source, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.
4. The permittee may make a change not specifically addressed or prohibited by the permit terms and conditions without requiring a permit revision, provided the following conditions are met:
 - a. Each proposed change does not weaken the enforceability of any existing permit conditions;
 - b. The Department has not objected to such change;
 - c. Each proposed change meets all applicable requirements and does not violate any existing permit term or condition; and
 - d. The permittee provides contemporaneous written notice to the Department and the administrator of each change that is above the level for insignificant emission units as defined in ARM 17.8.1201(22) and 17.8.1206(3), and the written notice describes each such change, including the date of the change, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.
5. The permit shield authorized by ARM 17.8.1214 shall not apply to changes made pursuant to ARM 17.8.1224(3) and (5), but is applicable to terms and conditions that allow for increases and decreases in emissions pursuant to ARM 17.8.1224(4).

K. Significant Permit Modifications

ARM 17.8, Subchapter 12, Operating Permit Program §1227(1), (3)&(4)

1. The modification procedures set forth in 2 below must be used for any application requesting a significant modification of this permit. Significant modifications include the following:
 - a. Any permit modification that does not qualify as either a minor modification or as an administrative permit amendment;
 - b. Every significant change in existing permit monitoring terms or conditions;
 - c. Every relaxation of permit reporting or recordkeeping terms or conditions that limit the Department's ability to determine compliance with any applicable rule, consistent with the requirements of the rule; or
 - d. Any other change determined by the Department to be significant.
2. Significant modifications shall meet all requirements of ARM Title 17, Chapter 8, including those for applications, public participation, and review by affected states and the administrator, as they apply to permit issuance and renewal, except that an application for a significant permit modification need only address in detail those portions of the permit application that require revision, updating, supplementation or deletion.

3. The permit shield provided for in ARM 17.8.1214 shall extend to significant modifications.

L. Reopening for Cause

ARM 17.8, Subchapter 12, Operating Permit Program §1228(1)&(2)

This permit may be reopened and revised under the following circumstances:

1. Additional applicable requirements under the FCAA become applicable to the facility when the permit has a remaining term of 3 or more years. Reopening and revision of the permit shall be completed not later than 18 months after promulgation of the applicable requirement. No reopening is required under ARM 17.8.1228(1)(a) if the effective date of the applicable requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms or conditions have been extended pursuant to ARM 17.8.1220(12) or 17.8.1221(2);
2. Additional requirements (including excess emission requirements) become applicable to an affected source under the Acid Rain Program. Upon approval by the administrator, excess emission offset plans shall be deemed incorporated into the permit;
3. The Department or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emission standards or other terms or conditions of the permit; or
4. The administrator or the Department determines that the permit must be revised or revoked and reissued to ensure compliance with the applicable requirements.

M. Permit Expiration and Renewal

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(g), §1220(11)&(12), and §1205(2)(d)

1. This permit is issued for a fixed term of 5 years.
2. Renewal of this permit is subject to the same procedural requirements that apply to permit issuance, including those for application, content, public participation, and affected state and administrator review.
3. Expiration of this permit terminates the permittee's right to operate unless a timely and administratively complete renewal application has been submitted consistent with ARM 17.8.1221 and 17.8.1205(2)(d). If a timely and administratively complete application has been submitted, all terms and conditions of the permit, including the application shield, remain in effect after the permit expires until the permit renewal has been issued or denied.
4. For renewal, the permittee shall submit a complete air quality operating permit application to the Department not later than 6 months prior to the expiration of this permit, unless otherwise specified. If necessary to ensure that the terms of the existing permit will not lapse before renewal, the Department may specify, in writing to the permittee, a longer time period for submission of the renewal application. Such written notification must be provided at least 1 year before the renewal application due date established in the existing permit.

N. Severability Clause

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(i)&(l)

1. The administrative appeal or subsequent judicial review of the issuance by the Department of an initial permit under this subchapter shall not impair in any manner the underlying applicability of all applicable requirements, and such requirements continue to apply as if a final permit decision had not been reached by the Department.

2. If any provision of a permit is found to be invalid, all valid parts that are severable from the invalid part remain in effect. If a provision of a permit is invalid in one or more of its applications, the provision remains in effect in all valid applications that are severable from the invalid applications.

O. Transfer or Assignment of Ownership

ARM 17.8, Subchapter 12, Operating Permit Program §1225(2)&(4)

1. If an administrative permit amendment involves a change in ownership or operational control, the applicant must include in its request to the Department a written agreement containing a specific date for the transfer of permit responsibility, coverage and liability between the current and new permittee.
2. The permit shield provided for in ARM17.8.1214 shall not extend to administrative permit amendments.

P. Emissions Trading, Marketable Permits, Economic Incentives

ARM 17.8, Subchapter 12, Operating Permit Program §1226(2)

Notwithstanding ARM 17.8.1226(1) and (7), minor air quality operating permit modification procedures may be used for permit modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches, to the extent that such minor permit modification procedures are explicitly provided for in the Montana State Implementation Plan or in applicable requirements promulgated by the administrator.

Q. No Property Rights Conveyed

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(d)

This permit does not convey any property rights of any sort, or any exclusive privilege.

R. Testing Requirements

ARM 17.8, Subchapter 1, General Provisions §105

The permittee shall comply with ARM 17.8.105.

S. Source Testing Protocol

ARM 17.8, Subchapter 1, General Provisions §106

The permittee shall comply with ARM 17.8.106.

T. Malfunctions

ARM 17.8, Subchapter 1, General Provisions §110

The permittee shall comply with ARM 17.8.110.

U. Circumvention

ARM 17.8, Subchapter 1, General Provisions §111

The permittee shall comply with ARM 17.8.111.

V. Motor Vehicles

ARM 17.8, Subchapter 3, Emission Standards §325

The permittee shall comply with ARM 17.8.325.

W. Annual Emissions Inventory

ARM 17.8, Subchapter 5, Air Quality Permit Application, Operation and Open Burning Fees §505 (STATE ONLY)

The permittee shall supply the Department with annual production and other information for all emission units necessary to calculate actual or estimated actual amount of air pollutants emitted during each calendar year. Information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request, unless otherwise specified in this permit. Information shall be in the units required by the Department.

X. Open Burning

ARM 17.8, Subchapter 6, Open Burning §604, 605 and 606

The permittee shall comply with ARM 17.8.604, 605 and 606.

Y. Montana Air Quality Permits

ARM 17.8, Subchapter 7, Permit, Construction and Operation of Air Contaminant Sources §745 and 764 (ARM 17.8.745(1) and 764(1)(b) are STATE ENFORCEABLE ONLY until approval by the EPA as part of the SIP)

1. Except as specified, no person shall construct, install, modify or use any air contaminant source or stack associated with any source without first obtaining a permit from the Department or Board. A permit is not required for those sources or stacks as specified by ARM 17.8.744(1)(a)-(k).
2. The permittee shall comply with ARM 17.8.743, 744, 745, 748, and 764.
3. ARM 17.8.745(1) specifies de minimis changes as construction or changed conditions of operation at a facility holding a Montana Air Quality Permit (MAQP) issued under Chapter 8 that does not increase the facility's potential to emit by more than 5 tons per year of any pollutant, except:
 - a. Any construction or changed condition that would violate any condition in the facility's existing MAQP or any applicable rule contained in Chapter 8 is prohibited, except as provided in ARM 17.8.745(2);
 - b. Any construction or changed conditions of operation that would qualify as a major modification under Subchapters 8, 9 or 10 of Chapter 8;
 - c. Any construction or changed condition of operation that would affect the plume rise or dispersion characteristic of emissions that would cause or contribute to a violation of an ambient air quality standard or ambient air increment as defined in ARM 17.8.804;
 - d. Any construction or improvement project with a potential to emit more than 5 tons per year may not be artificially split into smaller projects to avoid Montana Air Quality Permitting; or

- e. Emission reductions obtained through offsetting within a facility are not included when determining the potential emission increase from construction or changed conditions of operation, unless such reductions are made federally enforceable.
4. Any facility making a de minimis change pursuant to ARM 17.8.745(1) shall notify the Department if the change would include a change in control equipment, stack height, stack diameter, stack gas temperature, source location or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emission unit. The notice must be submitted, in writing, 10 days prior to start up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(1) (STATE ENFORCEABLE ONLY until approval by the EPA as part of the SIP).

Z. National Emission Standard for Asbestos

40 CFR, Part 61, Subpart M

The permittee shall not conduct any asbestos abatement activities except in accordance with 40 CFR 61, Subpart M (National Emission Standard for Hazardous Air Pollutants for Asbestos).

AA. Asbestos

ARM 17.74, Subchapter 3, General Provisions and Subchapter 4, Fees

The permittee shall comply with ARM 17.74.301, *et seq.*, and ARM 17.74.401, *et seq.* (State only)

BB. Stratospheric Ozone Protection – Servicing of Motor Vehicle Air Conditioners

40 CFR, Part 82, Subpart B

If the permittee performs a service on motor vehicles and this service involves ozone-depleting substance/refrigerant in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR 82, Subpart B.

CC. Stratospheric Ozone Protection – Recycling and Emission Reductions

40 CFR, Part 82, Subpart F

The permittee shall comply with the standards for recycling and emission reductions in 40 CFR 82, Subpart F, except as provided for MVACs in Subpart B:

1. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156;
2. Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158;
3. Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technical certification program pursuant to §82.161;
4. Persons disposing of small appliances, MVACs and MVAC-like (as defined at §82.152) appliances must comply with recordkeeping requirements pursuant to §82.166;
5. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156; and

6. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.

DD. Emergency Episode Plan

The permittee shall comply with the requirements contained in Chapter 9.7 of the State of Montana Air Quality Control Implementation Plan.

Each major source emitting 100 tons per year located in a Priority I Air Quality Control Region, shall submit to the Department a legally enforceable Emergency Episode Action Plan (EEAP) that details how the source will curtail emissions during an air pollutant emergency episode. The industrial EEAP shall be in accordance with the Department's EEAP and shall be submitted according to a timetable developed by the Department, following Priority I reclassification.

EE. Definitions

Terms not otherwise defined in this permit or in the Definitions and Abbreviations Appendix of this permit, shall have the meaning assigned to them in the referenced regulations.

APPENDICES

Appendix A INSIGNIFICANT EMISSION UNITS

Disclaimer: The information in this appendix is not State or Federally enforceable, but is presented to assist SME, the permitting authority, inspectors, and the public.

Pursuant to ARM 17.8.1201(22)(a), an insignificant emission unit means any activity or emissions unit located within a source that: (i) has a potential to emit less than five tons per year of any regulated pollutant; (ii) has a potential to emit less than 500 pounds per year of lead; (iii) has a potential to emit less than 500 pounds per year of hazardous air pollutants listed pursuant to Section 7412 (b) of the FCAA; and (iv) is not regulated by an applicable requirement, other than a generally applicable requirement that applies to all emission units subject to Subchapter 12.

List of Insignificant Activities:

The following table of insignificant sources and/or activities were provided by SME.

Emissions Unit ID	Description
IEU01	Building Heater: Turbine Enclosure
IEU02	Building Heater: Admin/Maintenance/Electricals/STG Building
IEU03	Building Heater: Water Treatment Building
IEU04	Building Heater: Warehouse
IEU05	Building Heater: Water Pumphouse
IEU06	Building Heater: Fuel Gas Compressor Building
IEU07	Building Heater: CEMS Enclosures (2 each)

Appendix B DEFINITIONS and ABBREVIATIONS

"Act" means the Clean Air Act, as amended, 42 U.S. 7401, *et seq.*

"Administrative permit amendment" means an air quality operating permit revision that:

- (a) corrects typographical errors;
- (b) identifies a change in the name, address or phone number of any person identified in the air quality operating permit, or identifies a similar minor administrative change at the source;
- (c) requires more frequent monitoring or reporting by SME;
- (d) requires changes in monitoring or reporting requirements that the Department deems to be no less stringent than current monitoring or reporting requirements;
- (e) allows for a change in ownership or operational control of a source if the Department has determined that no other change in the air quality operating permit is necessary, consistent with ARM 17.8.1225; or
- (f) incorporates any other type of change which the Department has determined to be similar to those revisions set forth in (a)-(e), above.

"Applicable requirement" means all of the following as they apply to emission units in a source requiring an air quality operating permit (including requirements that have been promulgated or approved by the Department or the administrator through rule making at the time of issuance of the air quality operating permit, but have future-effective compliance dates, provided that such requirements apply to sources covered under the operating permit):

- (a) any standard, rule, or other requirement, including any requirement contained in a consent decree or judicial or administrative order entered into or issued by the Department, that is contained in the Montana state implementation plan approved or promulgated by the administrator through rule making under Title I of the FCAA;
- (b) any federally enforceable term, condition or other requirement of any Montana Air Quality Permit issued by the Department under Subchapters 7, 8, 9 and 10 of this chapter, or pursuant to regulations approved or promulgated through rule making under Title I of the FCAA, including parts C and D;
- (c) any standard or other requirement under Section 7411 of the FCAA, including Section 7411(d);
- (d) any standard or other requirement under Section 7412 of the FCAA, including any requirement concerning accident prevention under Section 7412(r)(7), but excluding the contents of any risk management plan required under Section 7412(r);
- (e) any standard or other requirement of the acid rain program under Title IV of the FCAA or regulations promulgated thereunder;
- (f) any requirements established pursuant to Section 7661c(b) or Section 7414(a)(3) of the FCAA;

- (g) any standard or other requirement governing solid waste incineration, under Section 7429 of the FCAA;
- (h) any standard or other requirement for consumer and commercial products, under Section 7511b(e) of the FCAA;
- (i) any standard or other requirement for tank vessels, under Section 7511b(f) of the FCAA;
- (j) any standard or other requirement of the regulations promulgated to protect stratospheric ozone under Title VI of the FCAA, unless the administrator determines that such requirements need not be contained in an air quality operating permit;
- (k) any national ambient air quality standard or increment or visibility requirement under part C of Title I of the FCAA, but only as it would apply to temporary sources permitted pursuant to Section 7661c(e) of the FCAA; or
- (l) any federally enforceable term or condition of any air quality open burning permit issued by the Department under Subchapter 6.

“Combined Cycle Commissioning” means the process that begins with the first episode of fuel combustion in a turbine undergoing combined cycle operation, following any time a new or refurbished turbine or catalyst is installed or re-installed at the facility. The commissioning period for an individual turbine shall not exceed 16 weeks following the first episode of fuel combustion in the affected turbine. The commissioning period applies to combined cycle operation only since there are no post-combustion controls to adjust for simple cycle operation.

“Combined Cycle Shutdown” means any process that begins when the turbine initiates a transition from a final dispatched power set-point and ends when fuel is cut off to the combustion turbine, excluding any commissioning period as defined below, where turbine combustion emissions are vented to a combined cycle stack downstream of the heat recovery steam generator, catalytic oxidizer, and SCR. Any individual combined cycle shutdown shall not exceed one hour in duration. The averaging time for compliance with shutdown emission limits is one hour. The emission limit applies to any clock hour in which any part of a shutdown event occurs.

“Combined Cycle Steady-State/Transient Operation” means any process in which fuel is combusted in the turbine and emissions are vented to a combined cycle stack downstream of the heat recovery steam generator, catalytic oxidizer, and SCR, excluding any commissioning period as defined below, excluding startup or shutdown operation as defined above, but including periods of time in which a combustion turbine transitions between non-zero power set-points. The averaging time for compliance with steady-state/transient emission limits is one hour. The emission limit applies to any clock hour in which any part of a startup or shutdown does not occur.

“Combined Cycle Startup” means any process that begins with the introduction of fuel into a combustion turbine (i.e., from fuel no-flow to fuel flow condition) following hydraulic spin-up and ends when the dispatched power set-point is reached, excluding any commissioning period as defined below, where turbine combustion emissions are vented to a combined cycle stack downstream of the heat recovery steam generator, catalytic oxidizer, and SCR. Any individual combined cycle startup shall not exceed two hours in duration. The averaging time for compliance with startup emission limits is one hour. The emission limit applies to any clock hour in which any part of a startup event occurs.

“Department” means the Montana Department of Environmental Quality.

"Dispatched Power Set-Point" means the electricity generation level to be transmitted to the grid as requested by SME and approved by the grid operator. The grid operator instructs the plant to startup and go to the desired megawatt output level (i.e., dispatched set-point). If the generation load is not needed a shutdown is requested by SME and approved by the grid operator who then instructs the plant to shutdown.

"Emissions unit" means any part or activity of a stationary source that emits or has the potential to emit any regulated air pollutant or any pollutant listed under Section 7412(b) of the FCAA. This term is not meant to alter or affect the definition of the term "unit" for purposes of Title IV of the FCAA.

"FCAA" means the Federal Clean Air Act, as amended.

"Federally enforceable" means all limitations and conditions which are enforceable by the administrator, including those requirements developed pursuant to 40 CFR Parts 60 and 61, requirements within the Montana state implementation plan, and any permit requirement established pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51, Subpart I, including operating permits issued under an EPA approved program that is incorporated into the Montana state implementation plan and expressly requires adherence to any permit issued under such program.

"Fugitive emissions" means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

"General air quality operating permit" or "general permit" means an air quality operating permit that meets the requirements of ARM 17.8.1222, covers multiple sources in a source category, and is issued in lieu of individual permits being issued to each source.

"Hazardous air pollutant" means any air pollutant listed as a hazardous air pollutant pursuant to Section 112(b) of the FCAA.

"Non-federally enforceable requirement" means the following as they apply to emissions units in a source requiring an air quality operating permit:

- (a) any standard, rule, or other requirement, including any requirement contained in a consent decree, or judicial or administrative order entered into or issued by the Department, that is not contained in the Montana state implementation plan approved or promulgated by the administrator through rule making under Title I of the FCAA;
- (b) any term, condition or other requirement contained in any Montana Air Quality Permit issued by the Department under Subchapters 7, 8, 9 and 10 of this chapter that is not federally enforceable;
- (c) does not include any Montana ambient air quality standard contained in Subchapter 2 of this chapter.

"Permittee" means the owner or operator of any source subject to the permitting requirements of this subchapter, as provided in ARM 17.8.1204, that holds a valid air quality operating permit or has submitted a timely and complete permit application for issuance, renewal, amendment, or modification pursuant to this subchapter.

"Regulated air pollutant" means the following:

- (a) nitrogen oxides or any volatile organic compounds;
- (b) any pollutant for which a national ambient air quality standard has been promulgated;

- (c) any pollutant that is subject to any standard promulgated under Section 7411 of the FCAA;
- (d) any Class I or II substance subject to a standard promulgated under or established by Title VI of the FCAA; or
- (e) any pollutant subject to a standard or other requirement established or promulgated under Section 7412 of the FCAA, including but not limited to the following:
 - (i) any pollutant subject to requirements under Section 7412(j) of the FCAA. If the administrator fails to promulgate a standard by the date established in Section 7412(e) of the FCAA, any pollutant for which a subject source would be major shall be considered to be regulated on the date 18 months after the applicable date established in Section 7412(e) of the FCAA;
 - (ii) any pollutant for which the requirements of Section 7412(g)(2) of the FCAA have been met but only with respect to the individual source subject to Section 7412(g)(2) requirement.

"Responsible official" means one of the following:

- (a) For a corporation: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:
 - (i) the facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars); or
 - (ii) the delegation of authority to such representative is approved in advance by the Department.
- (b) For a partnership or sole proprietorship: a general partner or the proprietor, respectively.
- (c) For a municipality, state, federal, or other public agency: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a regional administrator of the environmental protection agency).
- (d) For affected sources: the designated representative in so far as actions, standards, requirements, or prohibitions under Title IV of the FCAA or the regulations promulgated thereunder are concerned, and the designated representative for any other purposes under this subchapter.

"Simple Cycle Shutdown" means any process that begins when the turbine initiates a transition from a final dispatched power set-point and ends when fuel is cut off to the combustion turbine, where turbine combustion emissions are vented to a simple cycle stack upstream of the heat recovery steam generator. Any individual shutdown shall not exceed one hour in duration. The averaging time for compliance with shutdown emission limits is one hour. The emission limit applies to any clock hour in which any part of a shutdown event occurs.

“Simple Cycle Startup” means any process that begins with the introduction of fuel into a combustion turbine (i.e., from fuel no-flow to fuel flow condition) following hydraulic spin-up and ends when the dispatched power set-point is reached, where turbine combustion emissions are vented to a simple cycle stack upstream of the heat recovery steam generator. Any individual simple cycle startup shall not exceed one hour in duration. The averaging time for compliance with startup emission limits is one hour. The emission limit applies to any clock hour in which any part of a startup event occurs.

“Simple Cycle Steady-State/Transient Operation” means any process in which fuel is combusted in the turbine and emissions are vented to a simple cycle stack upstream of the heat recovery steam generator, excluding startup or shutdown operation as defined above, but including periods of time in which a combustion turbine transitions between non-zero power set-points. The averaging time for compliance with steady-state/transient emission limits is one hour. The emission limit applies to any clock hour in which any part of a startup or shutdown does not occur.

Abbreviations:

ARM	Administrative Rules of Montana
ASTM	American Society of Testing Materials
BACT	Best Available Control Technology
BDT	bone dry tons
bhp	brake horsepower
Btu	British thermal unit
CEMS	Continuous Emissions Monitoring System
CFR	Code of Federal Regulations
CO	carbon monoxide
DEQ	Department of Environmental Quality
dscf	dry standard cubic foot
dscfm	dry standard cubic foot per minute
EEAP	Emergency Episode Action Plan
EPA	U.S. Environmental Protection Agency
EPA Method	Test methods contained in 40 CFR 60, Appendix A
EU	emissions unit
FCAA	Federal Clean Air Act
gr	grains
HAP	hazardous air pollutant
HGS	Highwood Generating Station
hr	hour
IEU	insignificant emissions unit
J	Joule
lb	pound
MAQP	Montana Air Quality Permit
Mbdft	thousand board feet
Method 5	40 CFR 60, Appendix A, Method 5
Method 9	40 CFR 60, Appendix A, Method 9
MMbdft	million board feet
MMBtu	million British thermal units
ng	nanogram
NO _x	oxides of nitrogen
NO ₂	nitrogen dioxide
O ₂	oxygen
Pb	lead
PM	particulate matter
PM ₁₀	particulate matter less than 10 microns in size
PM _{2.5}	particulate matter less than 2.5 microns in size
ppmvd	parts per million dry volume
PSD	Prevention of Significant Deterioration
psi	pounds per square inch
scf	standard cubic feet
SIC	Source Industrial Classification
SO ₂	sulfur dioxide
SO _x	oxides of sulfur
tpy	tons per year
U.S.C.	United States Code
VE	visible emissions
VOC	volatile organic compound

Appendix C NOTIFICATION ADDRESSES

Compliance Notifications:

Montana Department of Environmental Quality
Permitting and Compliance Division
Air Resources Management Bureau
P.O. Box 200901
Helena, MT 59620-0901

United States EPA
Air Program Coordinator
Region VIII, Montana Office
10 W. 15th Street, Suite 3200
Helena, MT 59626

Permit Modifications:

Montana Department of Environmental Quality
Permitting and Compliance Division
Air Resources Management Bureau
P.O. Box 200901
Helena, MT 59620-0901

Office of Partnerships and Regulatory Assistance
Air and Radiation Program
US EPA Region VIII 8P-AR
1595 Wynkoop Street
Denver, CO 80202-1129

Appendix D AIR QUALITY INSPECTOR INFORMATION

Disclaimer: The information in this appendix is not State or Federally enforceable, but is presented to assist SME, permitting authority, inspectors, and the public.

1. Direction to Plant:

Directions to plant are from the intersection of Hwy 89 and Hwy 228 (Highwood Road) which is about 3 miles east of Malstrom Air Force Base. Take Hwy 228 north for 6 miles to Salem Road. Take a left (north) on Salem road for 3.4 miles. Highwood Generating Station turn-in will be on the right. Pull forward to gate entrance and push call button at key pad for check-in.

2. Safety Equipment Required:

Minimum Safety Equipment shall be hard hat, steel toe boots and ANSI approved safety glasses.

3. Facility Plot Plan:

A facility plot plan was provided in the application for MAQP #4429-00/OP4429-00.

Permit Requirements**STEP 3**

Read the standard requirements.

(1) The designated representative of each affected source and each affected unit at the source shall:

(i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and

(ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;

(2) The owners and operators of each affected source and each affected unit at the source shall:

(i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and

(ii) Have an Acid Rain Permit.

Monitoring Requirements

(1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.

(2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the source or unit, as appropriate, with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.

(3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements

(1) The owners and operators of each source and each affected unit at the source shall:

(i) Hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and

(ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.

(2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.

(3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:

(i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or

(ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).

Sulfur Dioxide Requirements, Cont'd.**STEP 3, Cont'd.**

- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Requirements

The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Excess Emissions Requirements

- (1) The designated representative of an affected source that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
- (2) The owners and operators of an affected source that has excess emissions in any calendar year shall:
 - (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
 - (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

Recordkeeping and Reporting Requirements

- (1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
 - (i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;

Recordkeeping and Reporting Requirements, Cont'd.

STEP 3, Cont'd.

- (ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
 - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
 - (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.
- (5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
- (6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit.
- (7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:

- (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating

Highwood Generating Station

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Facility (Source) Name (from STEP 1)

Effect on Other Authorities, Cont'd.

STEP 3, Cont'd.

to applicable National Ambient Air Quality Standards or State Implementation Plans;

(2) Limiting the number of allowances a source can hold; *provided*, that the number of allowances held by the source shall not affect the source's obligation to comply with any other provisions of the Act;

(3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;

(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,

(5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

Certification

STEP 4

Read the
certification
statement,
sign, and date.

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name **Tim Gregori, Manager**

Signature

TRG

Date **04/24/2009**